

REMARKS/ARGUMENTS

Reexamination and reconsideration of this application as amended is requested. By this amendment, Claims 1, 10-11, 20-21, 30, 32, and 36 have been amended. After this amendment, Claims 1-37 remain pending in this application.

Claim Rejections - 35 USC § 112

The Examiner rejected Claims 1, 10-11, 19-21, 29-30, 32, and 35-36 under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter that the Applicants regard as the invention.

Specifically, with regard to Claims 1, 10-11, 19-21, 29-30, 32, and 35-36, the Examiner stated that the term "substantially" renders the claim indefinite because it is unclear as to the scope or limit of claimed invention.

Applicants have amended Claims 1, 10-11, 20-21, 30, 32, and 36 to more clearly and definitely recite the present invention. Applicants have amended Claims 1, 10-11, 20-21, 30, 32, and 36 to more clearly recite "overlapping portion". Support for these amendments may be found in the specification as originally filed, see for example FIG. 4; page 11, lines 13-14; page 12, lines 1-21; page 18, lines 5-17, and page 29, lines 17-20. Requests requesting the same portion of information or content are grouped together. See for example Id.. The requests only have to request an overlapping portion of content to be considered similar. See Id. For example, the second networked device might request information that overlaps a portion of the information requested by the first networked device. Therefore, the information requested by the networked devices does not necessarily have to be exactly the same, the information only has to overlap to be combined in a combined response multicast packet.

Accordingly, in view of the amendments and remarks above, Applicants believe that the rejection of Claims 1, 10-11, 20-21, 30, 32, and 36 under 35 U.S.C. 112, second paragraph has been overcome. The Examiner should withdraw the rejection of these claims.

Regarding Claims 19, 29, and 35, the Examiner cites MPEP § 2173.05(d) in support of the rejection of these claims. However, MPEP § 2173.05(d) is directed towards exemplary language (e.g. "for example" and "such as"). Claims 19, 29, and 35 include the language "substantially the same as a retransmit time..." which Applicants believe is more properly governed by MPEP § 2173.05(b). MPEP § 2173.05(b) states that even though the claim language, including terms of degree, may not be precise, this fact does not automatically render the claim indefinite under 35 U.S.C. 112, second paragraph. *Seattle Box Co., v. Industrial Crating & Packing, Inc.*, 731 F.2d 818, 221 USPQ 568 (Fed. Cir. 1984). Acceptability of the claim language depends on whether one of ordinary skill in the art would understand what is claimed, in light of the specification.

MPEP § 2173.05(b) also states that the term "substantially" is often used in conjunction with another term to describe a particular characteristic of the claimed invention. It is a broad term. *In re Nehrenberg*, 280 F.2d 161, 126 USPQ 383 (CCPA 1960). The court held that the limitation "to substantially increase the efficiency of the compound as a copper extractant" was definite in view of the general guidelines contained in the specification. *In re Mattison*, 509 F.2d 563, 184 USPQ 484 (CCPA 1975). The court held that the limitation "which produces substantially equal E and H plane illumination patterns" was definite because one of ordinary skill in the art would know what was meant by "substantially equal." *Andrew Corp. v. Gabriel Electronics*, 847 F.2d 819, 6 USPQ2d 2010 (Fed. Cir. 1988).

The present Specification provides examples illustrating how a destination is placed within a retransmit group based on retransmit time. See for example, pages 16-17, lines 14-20 and 1-21 respectively; and page 31, lines 14-21. A server may determine the

initial retransmit time associated with a networked device (destination) from the initial handshake with the associated networked device. See Id. Then a running average of further handshakes may be performed which allows an estimation of what retransmit group a destination should be placed in. See Id. For example, if the retransmit time of a networked device falls within a specific range associated with a retransmit group then the destination will be allocated to that retransmit group. Therefore, the Specification contains sufficient disclosure illustrating what is meant by "substantially the same as a retransmit time..." Additionally, one of ordinary skill in the art would know what was meant by "substantially the same as a retransmit time..." in light of the specification with particular attention to the above citations.

Accordingly, in view of the remarks above, Applicants believe that the rejection of Claims 19, 29, and 35 under 35 U.S.C. 112, second paragraph has been overcome. The Examiner should withdraw the rejection of these claims.

Claim Rejections - 35 USC § 102

The Examiner rejected Claims 1-4, 7-8, 11-14, and 17-18 under 35 U.S.C. 102(e) as being anticipated by Diwan U.S. Patent No. 6,801,936.

Applicants have amended independent Claims 1 and 11 to more clearly and distinctly recite the present invention. Applicants have amended Claims 1 and 11 to more clearly recite "the first request requesting a **first portion of information to be delivered to the first networked device as an ordinary unicast packet**"; "the second request requesting a **second portion of information to be delivered to the second networked device as an ordinary unicast packet, the second portion of information requested including an overlapping portion of information that overlaps the first portion of information requested by the first request**"; and "creating a combined response, **the combined response** destined for reception by the first networked device

and by the second networked device, the combined response including the **overlapping** portion of information requested by the first and second networked devices, **wherein the combined response comprises a multicast packet**".

Support for these amendments may be found in the specification as originally filed, see for example FIG. 4; page 5, lines 13-17; page 11, lines 13-14; ; page 12, lines 1-21; page 18, lines 5-17; page 19, lines 10-11; page 21, lines 3-6; page 23, lines 15-21; page 26, lines 5-10; page 29, lines 17-20; pages 31-32, lines 21 and 1-5 respectively; See also U.S. Patent Application No. 09/774,505, entitled "Method And System For Efficiently Delivering Content To Multiple Requesters", filed on January 31, 2001, generally and at paragraph [0056].

Diwan teaches that subscribers **explicitly join multicast groups** that are available within an agent to receive the requested information. See Diwan col. 5, lines 28-37; cols. 5-6, lines 60-67 and 1-5 respectively. The Examiner directed the Applicants to col. 2, lines 8-14 and FIG. 1 of Diwan, wherein Diwan teaches a method for delivering information. Multiple subscribers register with an agent and request different types of information. The information is then collected from multiple information sources over a network by the agent. The parts of the collected information that are common to the requests of a group of subscriber is then identified. A multicast message is then generated by the agent and contains the common information and is transmitted to the group of subscribers. The Examiner also directs the Applicants to col. 4, lines 52-55 of Diwan, wherein Diwan teaches that a request field may store information that indicates what type of information that the subscriber(s) identified in a corresponding subscriber field.

In contrast, as now recited for amended independent Claims 1 and 11 the presently claimed invention recites receiving a first request from a first networked device. **The first request requests a first portion of information that is to be delivered to the first networked device as an ordinary unicast packet.** A second

request is received from a second networked device that requests a second portion of information that is to be delivered to the second networked device as an ordinary unicast packet. The second portion of information requested including an overlapping portion of information that overlaps the first portion of information requested by the first request. The first request and second request are then collected into a bucket. A combined response is created and is destined for reception by the first networked device and by the second networked device. The combined response includes the overlapping portion of information requested by the first and second networked devices. The combined response also includes a multicast packet.

Diwan does not teach, anticipate, or suggest that requested information or content is to be delivered to the requesting device as an ordinary unicast packet. In Diwan, subscribers register with an agent so that the subscribers can receive their requested information. See Diwan col. 3, lines 47-49. As stated above, the subscribers explicitly join multicast groups that are available within the agent to receive the requested information. See Diwan col. 5, lines 28-37; cols. 5-6, lines 60-67 and 1-5 respectively. The agent receives the information from the information providers and bundles the relevant information to be sent out to the appropriate subscribers. More specifically, the subscribers receive multicast information from the agent. See Diwan col. 6, lines 16-25. Therefore, Diwan is not creating a combined response that comprises a multicast packet and includes an overlapping portion of information that was requested by networked devices to be delivered to the requesting devices as an ordinary unicast packet.

In the presently claimed invention, the networked devices do not need to subscribe to a multicast group as they do in Diwan. The present invention allows networked devices to make standard point-to-point requests, for example, HTTP requests, and to receive standard point-to-point unicast responses such as HTTP responses, even though multicast is being used to deliver the requested information efficiently through a network ultimately to be received by the networked devices as standard point-to-point

unicast responses. These novel aspects of the present invention are illustrated by the amended language of independent Claims 1 and 11.

One advantage of the present invention is that unicast-based devices do not have to be modified when multicast is being used on a network because the devices can continue using standard point-to-point unicast-based communications. For example, Claims 7 and 8 recite "at least one of the first request and the second request comprises an HTTP request requesting a portion of information" and "at least one of the first request and the second request comprises an HTTP request requesting a portion of information", which illustrates one example of how the present invention allows unicast-based communications. The network devices in Diwan have to connect to the agent and subscribe to multicast groups. The devices request and receive the multicast packet. They clearly do not request and do not receive an ordinary unicast packet. Therefore, Diwan does not teach, anticipate, or suggest the presently claimed invention as recited for amended independent Claims 1 and 11, and for all dependent claims depending therefrom, respectively.

Accordingly, in view of the amendments and remarks above, Applicants believe that since Diwan does not teach, anticipate, or suggest, inter alia, the presently claimed **"the first request requesting a first portion of information to be delivered to the first networked device as an ordinary unicast packet"; "the second request requesting a second portion of information to be delivered to the second networked device as an ordinary unicast packet, the second portion of information requested including an overlapping portion of information that overlaps the first portion of information requested by the first request"; and "creating a combined response, the combined response destined for reception by the first networked device and by the second networked device, the combined response including the overlapping portion of information requested by the first and second networked devices, wherein the combined response comprises a multicast packet"**, the rejection of amended independent Claims

1 and 11 under 35 U.S.C. 102(e) as being anticipated by Diwan has been overcome. The Examiner should withdraw the rejection of these claims.

Claims 2-4, 7-8, 12-14 and 17-18 depend from Claims 1 and 11 respectively, either directly or by way of an intervening claim, and since dependent claims recite all of the limitations of the independent claim; it is believed that, therefore, claims 2-4, 7-8, 12-14 and 17-18 also recite in allowable form. Therefore, Applicants believe that the rejection of Claims 2-4, 7-8, 12-14 and 17-18 under 35 U.S.C. 102(e) as being anticipated by Diwan has also been overcome.

Claim Rejections - 35 USC § 103

The Examiner rejected Claims 5-6, 9-10, 15-16, 19-20, and 21-37 under 35 U.S.C. 103(a) as being unpatentable over Diwan U.S. Patent No. 6,801,936.

Applicants have amended independent Claims 21 and 32 to more clearly and distinctly recite the present invention. Applicants have amended Claims 21 and 32 to more clearly and distinctly recite **“a first request corresponding to the first networked device, the first request requesting a first portion of the content to be delivered to the first networked device as an ordinary unicast packet; “a second request corresponding to the second networked device, the second request requesting a second portion of content to be delivered to the second networked device as an ordinary unicast packet, the second portion of content requested including an overlapping portion of content that overlaps the first portion of content requested by the first request”;** **“creating a combined response, the combined response destined for reception by the first networked device and by the second networked device, the combined response including the overlapping portion of content requested by the first and second networked devices, wherein the combined response comprises a multicast”**. Support for these amendments may be found in the specification and drawings as originally filed,

for example see FIG. 4; and the Specification on page 5, lines 13-17; page 11, lines 13-14; page 12, lines 1-21; page 18, lines 5-17; page 19, lines 10-11; page 21, lines 3-6; page 23, lines 15-21; page 26, lines 5-10; page 29, lines 17-20; pages 31-32, lines 21 and 1-5 respectively; See also U.S. Patent Application No. 09/774,505, entitled "Method And System For Efficiently Delivering Content To Multiple Requesters", filed on January 31, 2001, generally and at paragraph [0056], which is incorporated by reference.

The above arguments and remarks regarding Claims 1 and 11 under the section entitled "Claim Rejections - 35 USC § 102", and more specifically with respect to the claim language **"to be delivered as an ordinary unicast packet"** and **"creating a combined response, the combined response destined for reception by the first networked device and by the second networked device, the combined response including the overlapping portion of information requested by the first and second networked devices, wherein the combined response comprises a multicast packet"**, are likewise applicable here in support of the allowability of Claims 21 and 32. These applicable arguments have already been presented above and will not be repeated here.

Accordingly, in view of the amendments and remarks above, Applicants believe that Diwan does not teach, anticipate, or suggest, inter alia, the presently claimed **"requesting a first portion of the content to be delivered to the first networked device as an ordinary unicast packet; "a second request corresponding to the second networked device, the second request requesting a second portion of content to be delivered to the second networked device as an ordinary unicast packet, the second portion of content requested including an overlapping portion of content that overlaps the first portion of content requested by the first request"; "creating a combined response, the combined response destined for reception by the first networked device and by the second networked device, the combined response including the overlapping portion of content requested by the first and second networked devices, wherein the combined response comprises a multicast"**, nor do Applicants believe that the presently claimed invention, as recited for amended Claims 21 and 32, being taken as

a whole, is obvious to one of ordinary skill in the art. Therefore, Applicants believe that the rejection of amended independent Claims 21 and 32 under 35 U.S.C. 103(a) as being anticipated by Diwan has been overcome. The Examiner should withdraw the rejection of these claims.

Claims 5-6, 9-10, 15-16, 19-20, 22-31, and 33-37 depend from Claims 21 and 32 respectively, either directly or by way of an intervening claim, and since dependent claims recite all of the limitations of the independent claim; it is believed that, therefore, Claims 5-6, 9-10, 15-16, 19-20, 22-31, and 33-37 also recite in allowable form. Therefore, Applicants believe that the rejection of these claims has also been overcome. However, additional arguments regarding Claims 5-6, 9-10, 15-16, 19-20, 25-26, 29-31, and 37, are given below.

With respect to Claims 5-6, 9-10 15-16, 25-26, 31, and 37, the Examiner correctly stated that Diwan does disclose that the multicast transmission comprises a Small Group Multicast protocol and that "at least one of the first request and the second request comprises and acknowledgement (ACK) requesting a portion of information". However, the Examiner stated that these elements would have been obvious to one of ordinary skill in the art. The Statute expressly requires that obviousness or non-obviousness be determined for the claimed subject matter "as a whole," and the key to proper determination of the differences between the prior art and the present invention is giving full recognition to the invention "as a whole." Obviousness is also determined at the time the invention was made. For example, using Small Group Multicast protocol or having at least one of the requests comprise an ACK in view of the claimed invention taken as a whole, would not have been obvious to one of ordinary skill in the art.¹ Accordingly, without any teaching or suggestion found in Diwan, the Examiner has failed to properly establish a prima facie case of obviousness of the invention as "a whole."

¹ If, however, the Examiner's statements are based on facts within the personal knowledge of the Examiner, the Applicants respectfully request that the Examiner support these references by filing an affidavit as is allowed under MPEP §707 citing 37 CFR 1.104(d)(2).

The Applicants respectfully submit that the present invention additionally distinguishes over Diwan for at least this reason as well.

With respect to Claims 9-10, 19-20 and 29-30, the Examiner correctly stated that Diwan does not disclose the retransmit time associated with communication with the first networked device is substantially the same as a retransmit time associated with communication with the second networked device. However, the Examiner stated that it would have been obvious to one of ordinary skill in the art to allow users to set the specific response time to their requests according to their specific requirements.

As the Examiner stated, the response times are set by the users or by the receiving end. In contrast, the retransmit times in the present invention are controlled on the server or system end such as in Claims 29 and 30, and they are not calculated by a user. 35 U.S.C. § 103 expressly requires that obviousness or non-obviousness be determined for the claimed subject matter "as a whole," and the key to proper determination of the differences between the prior art and the present invention is giving full recognition to the invention "as a whole". Therefore, the subject matter of Claims 9-10, 19-20 and 29-30, taken as a whole, would not have been obvious to one of ordinary skill in the art at the time the present invention was made.² Accordingly, without any teaching or suggestion found in Diwan, the Examiner has failed to properly establish a prima facie case of obviousness of the invention as "a whole." The Applicants submit the present invention additionally distinguishes over Diwan for at least this reason as well.

² If, however, the Examiner's statements are based on facts within the personal knowledge of the Examiner, the Applicants respectfully request that the Examiner support these references by filing an affidavit as is allowed under MPEP §707 citing 37 CFR 1.104(d)(2).

Citation of Relevant Prior Art

Applicants have reviewed Donahue et al. U.S. Patent No. 6,411,616, Epstein et al. U.S. Publication No. 2004/0042479, Powell et al. U.S. Publication No. 2002/0073167, Marks et al. U.S. Publication No. 2002/0007374, McCrane U.S. Patent No. 6,785,704, Kenner et al. U.S. Patent No. 5,956,716, Medin U.S. Patent No. 6,370,571, and Poon et al. U.S. Patent No. 5,838,912 and believe that each of the cited references alone or in any combination, and including any combination with Diwan, do not teach, anticipate, or suggest the presently claimed invention.

Conclusion

The foregoing is submitted as full and complete response to the Official Action mailed November 15, 2004, and it is submitted that Claims 1-37 are in condition for allowance. Reconsideration of the rejection is requested. Allowance of Claims 1-37 is earnestly solicited.

No amendment made was related to the statutory requirements of patentability unless expressly stated herein. No amendment made was for the purpose of narrowing the scope of any claim, unless Applicants have argued herein that such amendment was made to distinguish over a particular reference or combination of references.

Applicants acknowledge the continuing duty of candor and good faith to disclose information known to be material to the examination of this application. In accordance with 37 CFR § 1.56, all such information is dutifully made of record. The foreseeable equivalents of any territory surrendered by amendment are limited to the territory taught by the information of record. No other territory afforded by the doctrine of equivalents is knowingly surrendered and everything else is unforeseeable at the time of this amendment by the Applicants and the attorneys.

The present application, after entry of this amendment, comprises thirty-seven (37) claims, including four (4) independent claims. Applicants have previously paid for thirty-seven (37) claims including four (4) independent claims. Applicants, therefore, believes that a fee for claims amendment is currently not due.

If the Examiner believes that there are any informalities that can be corrected by Examiner's amendment, or that in any way it would help expedite the prosecution of the patent application, a telephone call to the undersigned at (561) 989-9811 is respectfully solicited.

The Commissioner is hereby authorized to charge any fees that may be required or credit any overpayment to Deposit Account **50-0510**.

In view of the preceding discussion, it is submitted that the claims are in condition for allowance. Reconsideration and re-examination is requested.

Respectfully submitted,

Date: 2/15/05

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